Scott M. Matheson Governor



STATE OF UTAH
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110-2500

December 6, 1983 533-6146 Kenneth Lee Alkema, Director Room 474 801-533-6121

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Executive Director
801-533-6111

DIVISIONS

Community Health Services Environmental Health Family Health Services Health Care Financing

OFFICES

Administrative Services Community Health Nursing Management Planning Medical Examiner State Health Laboratory Robert H. Ruggeri P.O. Box 310 Moab, Utah 84532

> RE: S & S Mining Company Red Rock Mine Ponds

Dear Mr. Ruggeri:



I have reviewed evaporation rate information submitted for the proposed pond to serve the Red Rock Mine. Our evaluation indicates a net evaporation rate of approximately 40 inches per year instead of the 56 inches indicated in your November 10 letter. A value of 41 inches per year evaporation was used for the design of the Atlas Dunn and Callihaun mines at a similar elevation in San Juan County.

Based on an evaporation rate of 40 inches per year, the surface area needed would be slightly larger than the proposed pond. We estimate a size of approximately 50,000 square feet at the maximum water level would provide sufficient area for yearly evaporation of the 3600 gallons daily flow rate. A smaller pond would only be acceptable if the mine was scheduled to operate for less than a year. If this were the case, the pond volume and evaporation volume could be used as the design basis for total containment.

We request revised calculations indicating the method to achieve total containment. Since the current system is not approved, we request that the revised calculations be submitted by December 15, 1983 so that we can complete our review this year.

Sincerely,

Steven McNeal

Public Health Engineer

Utah Water Pollution Control

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SM: ja

cc: Robin Goff

Division of Oil, Gas and Mining - Tom Tetting

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